Prevalence of Infertility and Reproductive Outcomes among Celiac Disease Patients

Maram Alsefri, Ahmed Saleh, Abdullah Aljuryyan, Dania aljaroudi, Zaed Asiri, Peter Cahusac, Muhammad Amin, Weaam Babour

Background

Celiac disease (CD) adversely affects fertility and other reproductive complications in females, Alongside fertility in males. Women with CD have a significantly higher prevalence of reproductive disorders, including amenorrhea, early menopause, menstrual cycle irregularity, reduced fertility, and recurrent spontaneous abortion (1). In contrast, males Semen analysis revealed marked abnormalities in sperm morphology (teratozoospermia), motility (asthenozoospermia), Androgen insensitivity syndrome (AIS), and reduced sexual activity (2). However, no studies were conducted examining the association between celiac disorders and reproductive outcomes in a Saudi population. The aim is to determine the prevalence of infertility, miscarriage, and menstrual cycle disorders in a group of CD patients.

Methods

Review of Medical Records & Interviews

4,399 Adults screened
for Celiac Disease profile
From Jan 2014 - Feb 2020.

Meeting to Our Inclusion Criteria

Total eligible Patients = 216 CD Patients

- n = 23 Male
- n = 193 Female

Married Females

- n =134 (To determine infertility and miscarriage among CD).

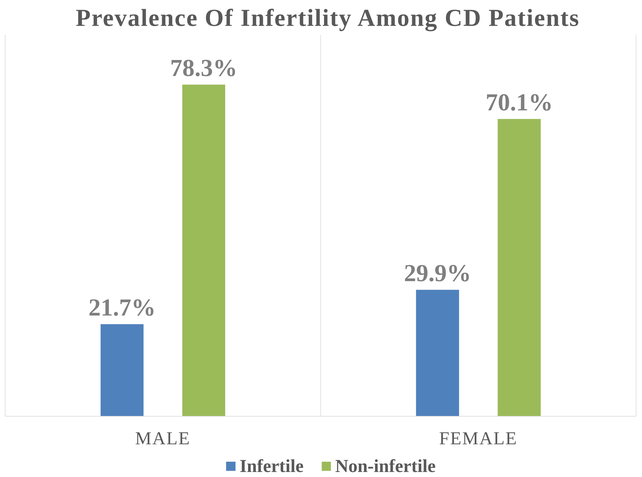
Married Males

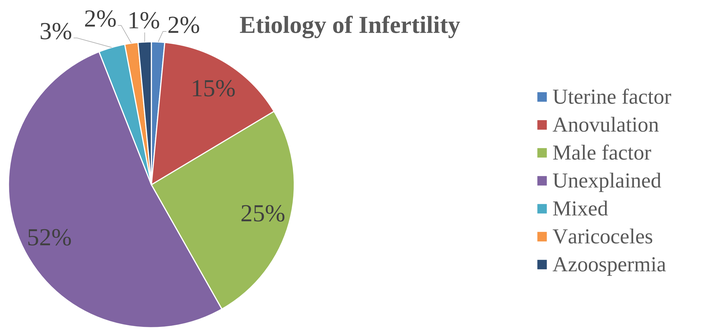
- n = 23 (To determine infertility among CD).

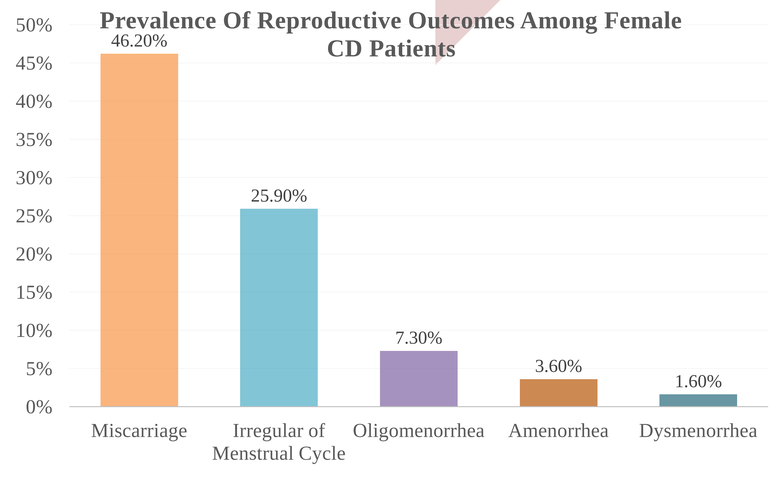
Both Married & Non-Married Females

- n =193 (To determine irregularity of menstrual cycle, and menstrual cycle disorders among CD).

Results







Conclusion

Infertility appears to be more common among both males and females affected by CD. The symptoms of reproductive disorders, such as delayed menarche, amenorrhea, earlier menopause, oligomenorrhea, miscarriage, impotence, hypogonadism, and adverse pregnancy outcomes, should alert physicians to screening for CD, even in the absence of suggestive symptoms. Several courses of action should be taken to increase the awareness about CD and its associated symptoms. It seems likely that CD, is a possible cause for infertility. Screening for CD in patients with infertility will assist in reducing its consequences on an individual's well-being and will help improve the implications of CD and infertility for public health.

References